

20-124

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

ABBEY HOTEL ACQUISITION, LLC, SETAI
HOTEL ACQUISITION, LLC, SETAI RESORT
AND RESIDENCE CONDOMINIUM
ASSOCIATION, INC. and SETAI VALET
SERVICES, LLC,

Plaintiffs,

NATIONAL SURETY CORPORATION,

Defendant.

Docket No.: 1:21-cv-03506-VEC

AFFIDAVIT OF
DR. ALEKSANDR ARAVKIN

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

Dr. Aleksandr Aravkin, being duly sworn deposes and says:

1. I am an Associate Professor of Applied Mathematics, Adjunct Associate Professor of Statistics, Mathematics, and Health Metrics Sciences, and the Director of Mathematical Sciences at the Institute for Health Metrics and Evaluation (“IHME”) at the University of Washington. My work at IHME includes developing new scientific computing methods for numerous applications, including methodology for estimates related to global health. In 2020, the research group I direct at IHME contributed to methodology used for COVID-19 forecasting. I received my Masters in Statistics and my Ph.D. in Mathematics from the University of Washington in 2010. A copy of my *curriculum vitae* is attached as **Exhibit “A”**.

2. I was retained on or about June 23, 2020 by Plaintiffs ABBEY HOTEL ACQUISITION, LLC, SETAI HOTEL ACQUISITION, LLC, SETAI RESORT AND RESIDENCE CONDOMINIUM ASSOCIATION, INC. and SETAI VALET SERVICES, LLC, to consult regarding the prevalence of Covid-19 in Miami-Dade County in March and February

2020 based on methodology and statistical analysis used to estimate the prevalence of infectious cases of Covid-19, which is at issue in this litigation.

3. Attached hereto as **Exhibit “B”** is a true and accurate copy of the expert report which I authored.

4. The above-referenced report accurately reflects my opinions in this matter and the opinions contained therein are based upon a reasonable degree of scientific certainty.

5. The statements made below in ¶¶ 6-7 also reflect my opinions in this matter and these opinions are based upon a reasonable degree of scientific certainty.

6. The methodology I used to calculate the prevalence of the Covid-19 infectious cases during the relevant time in Miami-Dade County is as follows:

- a. I estimated the number of infectious cases corresponding to recorded deaths attributed to COVID -19 using the Infection Fatality Ratio (“IFR”) which is the number of individuals who die of COVID -19 out of all individuals infected by COVID -19, including both symptomatic and asymptomatic cases.
- b. I distributed these cases over an appropriate time horizon, using current available estimates of the duration between infection and deaths.
- c. I computed the total estimated infectious cases by day, using current available estimates of duration of infectivity.

7. Based on my review and analysis of available data, I have calculated that in Miami-Dade County, the estimate for the prevalence of infectious cases of COVID-19 on March 26, 2020 was 2.9 out of every 1000 persons; with a plausible range of 2.3 to 3.8 persons out of every 1000 persons on March 26, 2020. These estimates may be modified based on additional information and review.

I declare under penalty of perjury under the laws of the State of Washington and the United States of America that the foregoing is true and correct.


Dr. Aleksandr Aravkin

Sworn to before me this
20th day of July, 2021


Notary Public

